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**Author:** Slater, Hartley

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This slim book is a collection of thirteen articles, most of them previously published. The author of *The De-Mathematisation of Logic* wanted, again, to have some of his articles compiled together, so that “their overall strength and force” (p. 1) could be appreciated. On this occasion, a body of ten articles (Chapters 2 to 11) is offered, preceded by a brief Introduction (Chapter 1), and three further articles are added as Appendixes.

The Introduction provides a useful map of the materials covered in the book. The author does not conceal his polemic intention, or rather his proud awareness that he is going against the logical mainstream, since his papers “correct some central aspects of the development of logic since the end of the nineteenth century” (p. 1). This provocative beginning makes the reader eager to have such flagrant mistakes unveiled, and the Introduction feeds our curiosity by announcing that the contrast between classical logic and natural grammar is going to be decisive. More specifically, the Introduction points to the two central topics of the book, which correspond to the two main absences that the author discovers in classical formal logic. What logic urgently needs, in his opinion, is the appropriate formal devices to allow reference to individuals and reference to propositions.

A lot of material is arranged around these two central topics: several samples of the subtleness of Hilbert’s Epsilon Calculus in the formalization of natural language, different angles on the discussions about Liar paradoxes, the application of the author’s ideas to Russell’s and related paradoxes, and even a novel development of Set Theory, but also some reflections on the metaphysics of Re-

alism and on the Theory of Truth, are spread throughout the book. The use of epsilon terms, the explicit distinction between sentences and propositions, and the correct understanding of the notion of a predicate are the three main ideas structuring the articles in this compilation.

Against the background of these recurring ideas, the body of the book is more or less thematically organized. It starts from the study of singular statements (mainly, in Chapter 2 “Back to Aristotle” and in Chapter 3 “Completing Russell’s Logic”, which consist of articles published in 2011 and 2007, respectively). Then a proper device for propositional reference is proposed, which leads to a novel treatment of Liar paradoxes in explicit contrast to some well-known recent accounts (mainly in Chapter 5 “Out of the Liar Tangle”, Chapter 6 “Translatable Self-Reference”, and Chapter 7 “What Priest Has Been Missing”, published in 2008, 2011 and 2010). Finally, the author’s recent developments in connection with indexicality are explained (mainly in Chapter 8 “Natural Language Consistency”, Chapter 10 “Quine’s Other Way Out”, both published in 2011, and Chapter 9 “A Perfect Language?”, previously unpublished). Chapter 11 “Logic Is not Mathematical”, also previously unpublished, is conceived as a summary of the main points in the collection, but it also offers a development of these ideas in intensional and fictional domains. The articles in the Appendixes are some older pieces of work, in which the author shows the historical roots of what he considers to be the “derailment” (p. 1) of logic: I “The Central Error in the Tractatus” (2007), II “Frege’s Hidden Assumption” (2006) and III “Logic and Grammar” (2007).

Although the choice of a collection of articles (instead of writing a fresh new book) is in my opinion a handicap (because of some irritating repetitions and a certain general lack of unity), the book nevertheless contains several insights that deserve the logician’s attention. I will highlight some contrasts that I have found promising, even if the results obtained surely need further discussion. First, the distinction between the existence of an individual and the being-instantiated of an identifying property (pp. 12, 20, 30, 98, 102), which allows the author to manage some classical puzzles in Intensional Logic and also to develop a theory of fictions in contrast with Free Logics. Second, the distinction between reference and attribution (pp. 16, 30, 122), which accompanies the correction of Russell’s Theory of Descriptions by the use of logically proper names for individuals. Third, the crucial distinction between naming a sentence and referring to the proposition expressed by it (pp. 32, 39, 44, 54, 62, 72, 123), which is the basis of the author’s solution to the Liar paradox and some classical difficulties in Intensional Logic. And fourth, the contrast between the predicate of a sentence and the form of a sentence (pp. 78, 83, 85, 92), which allows

the author to solve Russell's and other self-reference paradoxes, by recovering indexicality as a formally tractable element of natural language.

The book contains both a set of technical proposals and a philosophical reflection about the nature of logic. The technical part is fairly developed: in sum, Slater's articles show how the Epsilon Calculus provides a satisfactory formalization of natural language, seems to avoid paradoxes (with the advantage of being a conservative extension of classical Predicate Logic), and allows a natural treatment of fictional discourse. The philosophical part, which is reflected in the title of the compilation, is in fact the core of the author's research programme: "logic is not mathematical", that is, logical analysis must attend to natural language, rather than to mathematical structures independently construed. The main goal of this research programme is the construction of a context-sensitive logical language, and the Epsilon Calculus has been shown to be quite a good candidate. In my opinion, Slater's hermetic claim that logic is "a literary pursuit" (p. 103), and some others in the same tone, should not obscure his contribution to Philosophical Logic.

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